



## MISSOURI

### FOREST SERVICE RESEARCH AND DEVELOPMENT

STATE FUNDING HISTORY	Enacted FY 2003 (\$)	Enacted FY 2004 (\$)	Pres. Budg. FY 2005 (\$)
<b>COLUMBIA</b>			
NC-4154 Ecol/Mgt. of Central Hdwd Forests	1,827,000	1,800,000	1,763,000
<b>MISSOURI TOTAL</b>	<b>1,827,000</b>	<b>1,800,000</b>	<b>1,763,000</b>

**RESEARCH & DEVELOPMENT**, a division of the USDA Forest Service (FS R&D), strives to be the "go to" organization for information and solutions to sustain forests and rangelands and the values they provide people. FS R&D has the flexibility to address today's issues effectively and to respond to tomorrow's needs. Among the world's leaders in forest conservation research, scientists contribute to the stewardship of land, real property and society by providing research results that help create jobs and affordable homes, and improve the health of trees, forests and forest ecosystems. Innovative research products permit the Forest Service and other public and private land managers to monitor and manage forest responses to environmental change, contributing significantly to the sustainability of the nation's forests and rangelands and improving human health.

FS R&D operates six research stations, the Forest Products Laboratory, and the International Institute of Tropical Forestry located in Puerto Rico. It employs over 500 scientists and hundreds of technical and support personnel at 67 field sites throughout the nation. The FY 2005 President's

Budget includes \$280,654,000 for Forest and Rangeland Research.

The **North Central Research Station**, headquartered in St. Paul, Minnesota, currently has research and development programs in six Midwestern states (Illinois, Indiana, Minnesota, Missouri, Michigan, and Wisconsin). The FY 2005 President's Budget is \$22,200,000, an increase of \$1,308,000 above FY 2004.

#### COLUMBIA

**NC-4154, Ecology and Management of Central Hardwood Ecosystems.** This unit provides new options that public and private landowners can use to regenerate, manage, and harvest high quality hardwood forests in the Central States. Unit scientists also provide new software tools that allow natural resource agencies in the Midwest to visualize the outcome of management actions on a virtual forest. These tools enable forest managers to see how planned management activities affect wildlife habitat, threatened and endangered species, biodiversity, and forest health as they implement science-based management on their

lands. As management methods are developed that meet a wide range of objectives, greater social acceptance for managed forests and a stronger, more competitive forest-based economy within the Central States are anticipated.

<http://www.ncrs.fs.fed.us/4154/>

#### **FY 2005 PROGRAM CHANGES:**

- The FY 2005 President's Budget directs increased spending on three priority research areas: Invasive species, watershed, and science application technology. It also includes increases for fixed costs.
- FS R&D continues the research at Columbia, which has:
  - Developed guidelines for mitigating declines in songbirds threatened by local and regional landscape changes.
  - Developed guidelines for sustaining oak using uneven-aged silviculture, an increasingly important management option for land managers and woodland owners trying to meet recreational, aesthetic, and wildlife management objectives.
- Forest Service Research and Development will lead an Agency-wide effort to optimize the delivery and practical use of research findings. This is essential to successful implementation of Forest Service priorities, including the President's Healthy Forest Initiative. Opportunities have been identified that leverage current science and technology applications efforts in healthy forests applied science, watershed management, invasive species, hazardous fuels utilization and management, and community preparedness. New funds in FY 2005 will be targeted to leading-edge technical assistance on a competitive basis.

#### **SIGNIFICANT RESEARCH PRODUCTS:**

Work continues at Columbia toward developing and delivering the following products:

- New techniques for restoring trees to bottomland forests devastated by flooding.
- An Internet-based system for delivering the latest knowledge about central hardwood management by allowing the user to choose the depth of information or data desired.
- A computer model that allows land managers to project the local effects of regional landscape changes on forests and wildlife habitats.

#### **SOME CLIENTS/COLLABORATORS:**

Environmental Protection Agency  
Indiana Department of Natural Resources  
Indiana University  
Lincoln University  
Missouri Department of Natural Resources  
Shawnee, Hoosier, and Mark Twain National Forests  
U.S. Geological Survey  
University of Missouri